



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3503 FAX (603) 271-5171



Pillsbury Lake Water District
Attn: Marilyn Plourde
PO Box 6159
Penacook, NH 03303

Re: Peninsula Water System
Webster, NH
EPA # 2462050

ADMINISTRATIVE ORDER
No. WD 04-009

March 31, 2004

A. INTRODUCTION

This Administrative Order is issued by the Department of Environmental Services, Water Division, to the Pillsbury Lake Water District pursuant to RSA 485:4 and RSA 485:58. This Administrative Order is effective upon issuance.

B. PARTIES

1. The Department of Environmental Services, Water Division ("DES"), is a duly constituted administrative agency of the State of New Hampshire, having its principal office at 29 Hazen Drive, Concord, NH.
2. The Pillsbury Lake Water District is a political subdivision having a mailing address through its representative, Marilyn Plourde, of PO Box 6159, Penacook, NH 03303. Marilyn Plourde is the designated representative of the Pillsbury Lake Water District for the purpose of water supply issues.

C. STATEMENTS OF FACTS AND LAW

1. RSA 485 authorizes DES to regulate public water supplies. RSA 485:3 authorizes DES to adopt drinking water rules which identify contaminants that may have an adverse effect on health, establish maximum contaminant levels that are acceptable for human consumption, establish criteria and procedures to assure compliance with such maximum contaminant levels, and identify criteria and standards to ensure the proper operation and maintenance of water systems. Pursuant to this authority, DES has adopted NH Admin. Rule Env-Ws 300 *et seq.*
2. The Pillsbury Lake Water District is the owner of a water system known as the Peninsula Water System that serves approximately 50 service connections with an estimated population of 125 persons in the Town of Webster, NH ("Water System"). The Water System is a community water system as defined in NH RSA 485:1-a, I and Env-Ws 302.02(i).

3. Env-Ws 360.10 requires a water system owner to take all appropriate actions to promptly repair and fully maintain the operational readiness of the water system, including the prompt repair of failed or impaired facilities.
4. Env-Ws 360.13(a) requires a water system owner to periodically review the supply capability of the water system versus customer demand for the purpose of ensuring that the water system can meet its obligations to customers.
5. Env-Ws 372.27(a) requires that a water distribution system be maintained to provide water pressure of at least 20 psi at peak flow at the sill elevation of each lot or unit.
6. During late January and throughout February 2004, DES received a number of complaints from residents connected to the Water System concerning chronic water outages and inadequate water pressure.
7. On February 23 and 24, 2004, DES staff received complaints from three customers of the Water System indicating that they had been out of water for periods ranging from 4 to 16 days. The customers, who lived on Deer Meadow Road, Windsor Terrace, and Merrimack Circle, stated that they believed frozen water mains and recurring water line breaks and/or leaks were at least partially to blame for the lack of water.
8. On February 25, 2004, DES staff conducted an onsite inspection ("the Inspection") of the Water System. Three people accompanied DES staff during the Inspection: a resident who had been volunteering to learn about the Water System, a representative of Stritt Landscaping Company who had been excavating water lines onsite, and a representative of Northeast Rural Water Association ("NeRWA"), a non-profit association that provides onsite assistance and training to water and wastewater systems in Massachusetts, Vermont, and New Hampshire. The NeRWA representative had been onsite numerous times since May 2003 assisting Water System representatives in leak detection, water audits, infrastructure inspections, etc.
9. Env-Ws 372.27(f) requires water piping to be bedded in sand or other appropriate material with a minimum cover of not less than 5 feet for year-round systems.
10. During the Inspection it was learned that in 2003 three leaks had been found and repaired in a section of the Water System's distribution line along Deer Meadow Road. In the process of excavating the water lines and repairing the leaks, workers observed that at least a portion of the Water System's distribution system consisted of poor quality two-inch PVC pipe installed in the 1960s.
11. During the Inspection, DES staff discovered a new water line leak near the junction of Deer Meadow Road and Christopher Roberts Road.
12. According to the representative from Stritt Landscaping, past water line excavations had indicated that some of the leaks may have been caused by backfill containing rocks and stones which eventually ruptured the water lines.

1. **Within 60 days of the date of this Order**, correct the deficiencies in the distribution water lines located on Deer Meadow Road, Windsor Terrace, and Merrimack Circle that are causing the water lines to break or freeze.
2. **Within 45 days of the date of this Order**, retain a consulting engineer to perform an engineering study of the Water System. The study must include, but is not limited to:
 - a) An examination of the adequacy of the Water System's sources and water storage tanks to meet current and predicted future customer demands in accordance with current DES design standards;
 - b) A review of historical water quality results, including the Water System's ability to meet the maximum contaminant level for arsenic of 0.01 mg/L by January 22, 2006; and
 - c) A review of the Water System's distribution system, including but not limited to, a determination of whether or not the existing water lines are made of the proper material, properly sized, buried to the proper depth, and installed with proper bedding and backfill material.
3. **Within 10 days** of being retained, the consulting engineer shall contact Richard Thayer, DES Water Supply Engineering Bureau, at (603) 271-2950 to discuss issues involving compliance with this Administrative Order.
4. **Within 60 days** of the consulting engineer contacting Richard Thayer as required above, submit a copy of the engineer's report to DES for review and approval.
5. **Within 30 days** of the submission of the engineer's report to DES as required above, Water System officials and the consulting engineer shall meet with DES staff to discuss the report and develop a long-term implementation schedule to correct the Water System's deficiencies.
6. **Within 30 days** of the meeting required in Item E.4., above, the Water System shall submit to DES a final, long-term implementation schedule, with milestone dates and final completion date set forth. Upon approval by DES, the implementation schedule shall be incorporated by reference into this Administrative Order and shall be enforceable hereunder.
7. Send correspondence, data, reports, and other submissions made in connection with this Administrative Order, **other than appeals**, to DES as follows:

Richard Thayer
Water Supply Engineering Bureau
Department of Environmental Services
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095
Voice: (603) 271-2950
Fax: (603) 271-5171
E-mail: rthayer@des.state.nh.us

13. During the Inspection, DES staff spoke with the Wescott family of 10 Windsor Terrace. The Wescotts reported that they had been without water for several days this winter due to a frozen water main on Windsor Terrace. The Wescotts indicated that the water main freezes almost every winter because, they believe, the main was laid on top of ledge in a trench that is only 2 to 3 feet deep. Currently, the frozen water main on Windsor Terrace affects only the Wescott residence, but there are at least 15 additional lots that will draw water from this water main if and when the lots are developed.

14. The Inspection included a check of the components in the Water System's pumphouse. DES staff observed that the Water System uses four 300 gallon pressure storage tanks. The valve to one tank was almost completely closed and the water level sight tubes on several tanks were not functioning. Despite plumbing connections that should allow the four tanks to contain the same amount of water under equal pressure, the tanks appeared to contain varying amounts of water under different pressures. The air compressor that supplies the pressure to the storage tanks showed signs of excessive wear that suggested the possibility of imminent failure.

15. Env-Ws 372.20(b) requires all community water systems to have duplicate booster pumps.

16. At the time of the Inspection, the Water System's duplicate pump had been removed for repairs.

17. Env-Ws 316.01(g) requires all existing community water systems to comply with the arsenic maximum contaminant level of 0.01 mg/L by January 22, 2006.

18. The Water System's most recent arsenic sample results, collected on July 24, 2003, indicated an arsenic level of 0.06 mg/L.

D. DETERMINATION OF VIOLATIONS

1. The Water System has violated Env-Ws 360.10 by failing to take all appropriate actions to promptly repair and fully maintain the operational readiness of the water system, including the prompt repair of failed or impaired facilities, as evidenced by the number of recent water line leaks, frozen water lines, and the condition of the water pressure tanks observed during a February 25, 2004, inspection of the pumphouse.

2. The Water System has violated Env-Ws 372.27(a) by failing to provide water pressure of at least 20 psi at peak flow at the sill elevation of each lot or unit.

3. The Water System has violated Env-Ws 372.27(f) by failing to bed all water piping in sand or other appropriate material with a minimum cover of not less than 5 feet.

E. ORDER

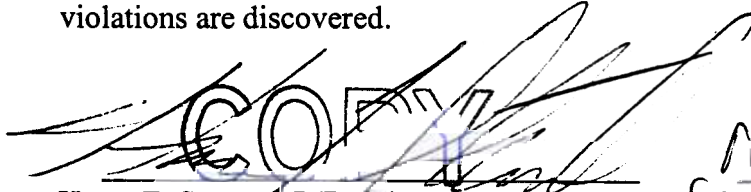
Based on the above findings, DES hereby orders the Pillsbury Lake Water District as follows:

F. APPEAL

Any person aggrieved by this Order may appeal the Order to the Water Council by filing an appeal that meets the requirements specified in Env-WC 200 within 30 days of the date of this Order. Copies of the rule are available from the DES Public Information Center at (603) 271-2975 or at <http://www.des.state.nh.us/desadmin.htm>. Appealing the Order does not automatically relieve the Pillsbury Lake Water District of the obligation to comply with the Order.

G. OTHER PROVISIONS

Please note that RSA 485:58 provides for administrative fines, civil penalties, and criminal penalties for the violations noted in this Order, as well as for failing to comply with the Order itself. The Pillsbury Lake Water District remains obligated to comply with all applicable drinking water statutes and rules. DES will continue to monitor the Pillsbury Lake Water District's compliance with applicable requirements and will take appropriate action if additional violations are discovered.



COPY
Harry T. Stewart, P.E., Director
Water Division



COPY
Michael P. Nolin, Commissioner

Certified Mail/RRR: 7000 0600 0023 9933 7845

cc: Gretchen Rule, DES Legal Unit
Public Information Officer, DES PIC Office
Jennifer Patterson, Sr. Assistant Attorney General
John Benham, Primary Operator
Webster Board of Selectmen
Nicholas Van Loan, M.D., Webster Health Officer
US EPA, Region 1